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IS 8751-1 (1978): Footwear sizes in mondopoint system, Part 1: Fundamental characteristics [CHD 19: Footwear]



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# *Indian Standard*

## FOOTWEAR SIZES IN MONDOPOINT SYSTEM

### PART I FUNDAMENTAL CHARACTERISTICS

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**INDIAN STANDARDS INSTITUTION**

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# *Indian Standard*

## FOOTWEAR SIZES IN MONDOPOINT SYSTEM

### PART I FUNDAMENTAL CHARACTERISTICS

#### 0. FOREWORD

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 3 March 1978, after the draft finalized by the Footwear Sectional Committee had been approved by the Chemical Division Council.

**0.2** This standard deals with the fundamental characteristics of an international system of footwear sizing, known as the Mondopoint system. The system lays down a method of marking footwear to indicate the dimensions of the average foot fitted. The range of footwear ( for example, size intervals, last grading ) will form the subject of other parts of this standard.

**0.3** This standard has been formulated based on ISO/2816-1973 'Fundamental characteristics of a system of shoe sizing to be known as Mondopoint, published by the International Organization for Standardization.

**0.4** The existing system of footwear sizes followed in India is known as English size scale and is covered by IS : 1638-1969\*. It is expected that in the near future, a changeover to the Mondopoint system will take place progressively. Publication of this standard is expected to familiarize footwear manufacturers, trade and the users with the basic features of the Mondopoint system.

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#### 1. SCOPE

**1.1** This standard prescribes the fundamental characteristics of the Mondopoint system of footwear sizing, applicable to all types of footwear without restriction.

#### 2. TERMINOLOGY

**2.1** For the purpose of this standard, the following definitions and those given in IS : 2050-1967† shall apply.

\*Sizes and fitting of footwear (*first revision*).

†Glossary of terms relating to footwear.

**2.1.1 Size of the Shoe** — Those measurements of a foot which are deemed sufficient to provide a shoe that will fit a foot corresponding to those measurements.

**2.1.2 Length of the Foot** — The horizontal distance between the perpendiculars in contact with the end of the most prominent toe and the most prominent part of the heel, measured with the subject standing ( the mass of the body equally distributed on both feet ) and wearing hose appropriate to the type of foot or shoe ( see Fig. 1 ).

**2.1.3 Perimeter of the Foot** — The length of circumference of the measured foot, using a flexible tape, neither too slack nor too tight, at the joint between the first and fifth metatarsals with the first phalanx of the first and fifth toes ( metatarsophalangeal joint ) under conditions identical with those used for measurement of length in 2.1.2 ( see Fig. 1 ).

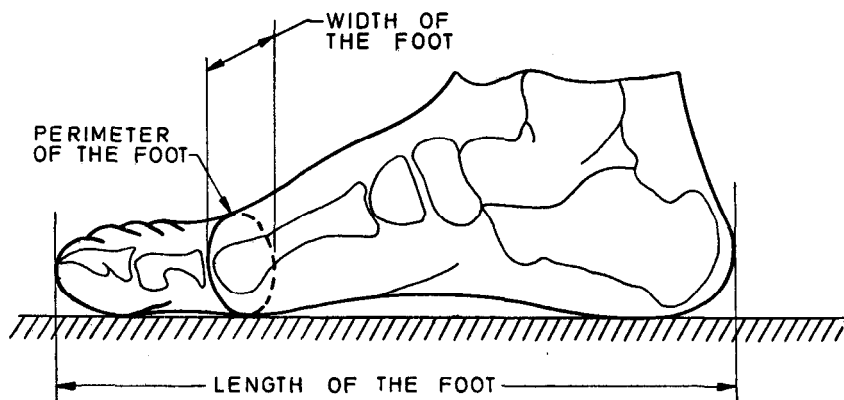


FIG. 1 MEASUREMENTS OF THE FOOT

**2.1.4 Width of the Foot** — The projection on a horizontal plane of the perimeter measured under the same conditions as the length ( see 2.1.2 ) and representing the horizontal distance between vertical lines in contact with the first and fifth metatarsophalangeal joints ( see Fig. 1 ).

**2.1.5 Average Foot** — A foot defined from the examination of statistical results and anatomical studies.

### 3. FUNDAMENTAL CHARACTERISTICS OF SIZING SYSTEM

**3.1** The International System of Units ( SI ) shall be the only one used in the measurement of foot, on which the sizing of footwear is based.



**3.2** The sizing system shall be based on the two following measurements:

- |                       |   |                                |
|-----------------------|---|--------------------------------|
| a) Length of the foot | } | as defined in 2.1.2 and 2.1.4. |
| b) Width of the foot  |   |                                |

**NOTE** — The above provisions do not preclude the use of the perimeter of the foot at the various stages of the manufacture of footwear.

#### **4. METHOD OF DEFINING THE SIZE**

**4.1** Each size marking is defined by reference to the dimensions of the average corresponding foot.

#### **5. METHOD OF EXPRESSING THE MEASUREMENTS OF THE SIZE**

**5.1** The measurements corresponding to the length and width of the foot shall be expressed in millimetres, to the nearest whole number.

**NOTE** — This provision does not preclude the use of codes as an additional means of expressing width.

**INTERNATIONAL SYSTEM OF UNITS ( SI UNITS )**

**Base Units**

QUANTITY	UNIT	SYMBOL
Length	metre	m
Mass	kilogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous intensity	candela	cd
Amount of substance	mole	mol

**Supplementary Units**

QUANTITY	UNIT	SYMBOL
Plane angle	radian	rad
Solid angle	steradian	sr

**Derived Units**

QUANTITY	UNIT	SYMBOL	CONVERSION
Force	newton	N	1 N = 0.101 972 kgf
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	1 T = 1 Wb/m <sup>2</sup>
Frequency	hertz	Hz	1 Hz = 1 c/s (s <sup>-1</sup> )
Electric conductance	siemens	S	1 S = 1 A/V
Pressure, stress	pascal	Pa	1 Pa = 1 N/m <sup>2</sup>